

REMARKS

Claims 1, 27, 48 and 61 are currently amended; claims 4, 18-23, 29, 38-44, 56-59, 69-75 are cancelled herewith; and claims 76-79 are new. Claims 1, 27, 48 and 61 have been amended to include the limitation "each head having a lower surface forming a crook for retaining loops". This limitation has been added to correct an antecedent basis issue that is described below, and not to overcome novelty or obviousness rejections. Support for the amendments to claims 1, 27, 48 and 61 is found, e.g., at page 10, lines 5-7, and support for new claims 76-79 is found, e.g., at page 12, lines 15-30. No new matter has been introduced.

Obvious errors in the Specification at page 3, line 4; page 4, line 7; page 4, line 9; page 4, line 12; and page 4, line 14 have been corrected by replacing "millimeters" by "mil".

Claims 5, 16, 17, 23, 30, 36, 37, 44, 50, 54, 55, 59, 64, 67 and 68 have been rejected as being indefinite. In particular, the Examiner states that each of claims 5, 23, 30, 44, 50, 59 and 64 lack antecedent basis for "each crook", and each of claims 16, 36, 54 and 67 lack antecedent basis for "the crooks". As discussed above, all independent claims have been amended to include the limitation "each head having a lower surface forming a crook for retaining loops". Applicant respectfully submits that each claim is now definite, and respectfully requests withdrawal of the rejections.

Claims 1-3, 6-9, 11-13, 15-17, 25-28, 31-34, 36, 37, 46-49, 51-55 and 65-68 have been rejected as being anticipated by Akeno, U.S. Patent No. 5,781,969 ("Akeno"). Applicant respectfully requests reconsideration for at least the following reasons.

Claim 1 requires, in pertinent part, a height of a lowermost extent of the well that is less than 60 percent of an overall height of the fastener element (i.e., $G/A < 0.6$). On page 3 of the Office Action, the Examiner reproduces Fig. 4B of the Akeno disclosure and contends that the drawing shows a height of a lowermost extent of the well that is less than 60 percent of an overall height of the fastener element. Applicant respectfully submits that such a conclusion is not supported by Akeno. Apparently, the Examiner has come to this conclusion by extending the line that passes through O' and that is parallel to the base of the fastener at a height H2 across the stem to the bottom of the "V" between the heads (see Akeno Fig. 4B). This is improper because

there is no disclosure in Akeno that places the "V" in the location suggested by the Examiner. As the Examiner is aware, a rejection based on measurements taken from the figures is improper absent some indication that the drawings are to scale (see, e.g., MPEP §2125 and *Hockerson-Halberstadt v. Avia Group*, 222 F.3d 951). Akeno provides no such indication, nor any indication of the location of the well with respect to the location of other features of the fastener element. In fact, the only disclosure in Akeno regarding the "V" between the heads is found at column 10, line 62 through column 11 line 6. Here Akeno states that it can be located in a desired position. Applicant respectfully submits that claim 1, and all claims that depend therefrom, are novel over Akeno.

Claim 27 requires, in pertinent part, a ratio of an overall height of at least one of the heads to a height of a lowermost extent of the well that is greater than 0.7 (i.e., $J/G > 0.7$). Apparently, here too the Examiner has come to the conclusion that claim 27 is anticipated by Akeno by scaling the drawings. As such use of unscaled patent drawings has been held to be improper, Applicant respectfully submits that claim 27, and all claims that depend therefrom, are novel over Akeno.

Claim 48 requires, in pertinent part, a ratio of an overall length of the fastener element to a height of a lowermost extent of the well that is greater than 2.5 (i.e., $L/G > 2.5$). Again, here too, the Examiner has come to the conclusion that claim 48 is anticipated by Akeno by scaling the drawings. Applicant respectfully submits that claim 48, and all claims that depend therefrom, are novel over Akeno.

Claim 61 requires, in pertinent part, that each fastener element have a mold release factor, defined as a ratio of a difference between a minimum solid length of the stem and a maximum solid length of the fastener element to the minimum solid length of the stem that is less than 0.1 (i.e., $MRF < 0.1$). Yet again, the Examiner has come to the conclusion that claim 61 is anticipated by Akeno by inferring information from the drawings that is not specifically disclosed. Since the location of the "V" is unknown, it would be impossible to find the maximum solid length from the drawings. Since the maximum solid length cannot be determined, it is simply impossible to calculate a MRF for Akeno's fastener elements from the

information contained in the Akeno reference. Applicant respectfully submits that claim 61, and all claims that depend therefrom, are novel over Akeno.

Claims 4, 5, 14, 18-24, 29, 30, 38-45, 50, 56-60, 64 and 69-71 have been rejected as being obvious over Akeno. Applicant respectfully requests reconsideration for at least the following reasons.

Claims 4, 5, 14 and 18-24 each depend from claim 1. Applicant submits that the ratio G/A (well height to overall fastener height) of less than 0.6 is not arbitrary. Applicant has taught that such a ratio provides fastener elements that are surprisingly easier to de-mold from fixed cavities, providing for improved manufacturability and reduced cost. At the same time, Applicant has also taught that fastener elements with such a ratio provide for improved fastening performance when mating with low loft loops, and also provide for enhanced product cycle life. For example, Applicant has found that each head of the fastener elements of claim 1 can demold without being impeded by its neighboring head, which allows for each fastener element to return to its nominal shape after demolding. Applicant has also found that when a load is applied to the fastener elements of claim 1 (such as by an engaged loop) the crook of each fastener element can bend open to release the loop without impeding the action of the neighboring crook. Akeno does not disclose nor contemplate such a low ratio of G/A . Rather, Akeno appears to overcome demolding difficulties by molding only a preform with upwardly extending 'ears' that must be deformed in a secondary operation to form loop-engageable heads. Thus, there is nothing in the teaching of Akeno that would have led someone of ordinary skill in this art away from Akeno's own solution to this problem, and toward Applicant's claimed invention. Applicant respectfully submits that claims 4, 5, 14 and 18-24 are each non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim, and requests withdrawal of the rejection.

Claims 29, 30 and 38-45 each depend from claim 27, and claims 50 and 56-60 each depend from claim 48. Applicant submits that the ratios J/G (overall height of the head to well height) greater than 0.7 (as specified by claim 27) and L/G (overall length of the fastener element to well height) greater than 2.5 (as specified by claim 48) are also not arbitrary, but in combination with features of respective base claims, can provide an improved fastener element.

Akeno does not disclose nor contemplate the claimed J/G or L/G ratios of claims 27 and 48, respectively, nor the advantages obtained by Applicant. Applicant respectfully submits that claims 29, 30 and 38-45 are each non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim, as are claims 50 and 56-60. Applicant respectfully requests withdrawal of the rejection.

Claims 64 and 69-71 each depend from claim 61. Applicant discloses at page 14, lines 25-28 that "maintaining a low mold release factor, such as below 0.1, helps removing the molded fastener elements" and it also helps "prevent mold fouling and wear and decreases permanent distention of the hook heads." Akeno does not disclose nor contemplate a mold release factor less than 0.1, nor is there any indication in Akeno that such a mold release factor helps in removing the molded fastener elements, to prevent mold fouling and wear, and decrease permanent distention of the hook heads. Applicant respectfully submits that claims 64 and 69-71 are each non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim. Applicant respectfully requests withdrawal of the rejection.

Claims 24, 45 and 60 have been rejected as being obvious over Akeno in view of Romanko, U.S. Patent No. 6,484,371 ("Romanko"). Claim 24 depends from claim 1, claim 45 depends from claim 27 and claim 60 depends from claim 48. The limitations of claims 1, 27 and 48 have been discussed above. Romanko generally describes a method of making discrete, spaced apart hooks by profile extruding hook-shaped rails, cutting the hook-shaped rails, and then stretching the cut rails to form discrete, spaced apart hooks. Romanko's fastener elements do not even have "V" shaped cutout between the heads. Furthermore, Romanko does not disclose nor even suggest any mold release factor, or recognize its importance. Thus, claims 24, 45 and 60 are non-obvious for at least the reason that Romanko fails to provide the elements of the base claim missing from Akeno, and Applicant respectfully requests withdrawal of the rejection.

Claims 10 and 35 have been rejected as being obvious over Akeno in view of Takizawa, U.S. Patent No. 5,537,720 ("Takizawa"). Claim 10 depends from claim 1, and claim 35 depends from claim 27, both of which have been described above. Takizawa does not disclose nor

suggest a height of a lowermost extent of the well that is less than 60 percent of an overall height of the fastener element, as claim 1 requires, nor does he disclose or suggest a ratio of an overall height of at least one of the heads to a height of a lowermost extent of the well that is greater than 0.7, as claim 27 requires. In fact, Takizawa does not even disclose a single dimension of his fastener elements. Applicant respectfully submit that claims 10 and 35 are non-obvious over the combination of Akeno and Takizawa for at least the reason that they depend from a non-obvious base claim, and respectfully requests withdrawal of the rejection.

Claim 14 has been rejected as being obvious over Akeno. Claim 14 depends from claim 1, and the non-obviousness of claim 1 has already been addressed above, with respect to the rejection of claim 4. Applicant submits that claim 14 is non-obvious for at least the reason that it depends from a non-obvious base claim. Furthermore, Applicant respectfully traverses the construction of claim 14 as a product-by-process claim. The word “severed” in this context is a structural distinction since it is known to persons of ordinary skill in the art that severing resin yields a different surface microstructure than, e.g., extruding or molding, and therefore connotes a structural attribute of the fastener element surfaces. Courts have held that certain words that appear to be “process” words are more appropriately interpreted as structural limitations when they are used as an adjective in a non-process sense, and the words adequately define a physical characteristic of the product. For example, “intermixed” has been held to be a structural limitation (*National Battery Co. v. Richardson Co.*, 63 F. 2d 289, 17 U.S.P.Q. 60, 1933), and so has “ground in place” (*Ex parte Rabezzana*, 4 U.S.P.Q. 430, 1930) and “pressfitted” (*Ex parte Wagner*, 58 U.S.P.Q. 500, 1942). In a more recent case, it was held that “work-hardened” speaks to the structure and not to the process of manufacture (*CVI/Beta Ventures, Inc. v. Custom Optical Frames, Inc.*, 893 F. Supp. 508, 519, D. Md., 1995). Applicant respectfully submit that since “severed” is used in this claim as an adjective in a non-process sense, and since the word adequately defines a physical characteristic of the product, it should be afforded weight as a structural limitation, as should the term “molded” in new claims 76-79, as structurally characterizing surfaces of the fastener elements.

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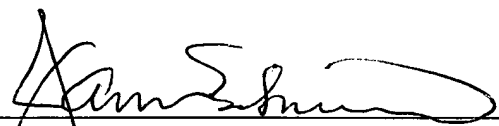
Attorney Docket No.: 05918-340001 / VGCP No. 6020

Applicant respectfully submits that all pending claims are patentable over all the art of record.

Enclosed is a check for \$120.00 for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 05918-340001.

Respectfully submitted,

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